Title (en)

Data burst communication techniques for use in increasing data throughput to mobile communication devices

Title (de)

Datenburstkommunikationsverfahren zur Verwendung bei steigendem Datendurchsatz zu mobilen Kommunikationsvorrichtungen

Title (fr)

Techniques de communication de paquets de données à utiliser pour augmenter le débit de données vers les dispositifs de communication mobiles

Publication

EP 2028772 B1 20100623 (EN)

Application

EP 07113521 A 20070731

Priority

EP 07113521 A 20070731

Abstract (en)

[origin: EP2028772A1] Methods and apparatus for use in increasing data throughput to mobile stations in a wireless communication network, where data is communicated between mobile stations and the wireless network in a plurality of data bursts within time slots assigned to the mobile station. One illustrative method includes the acts of receiving, through a wireless transceiver, data in a time slot W; tuning the wireless transceiver, during a first portion of a time slot X which follows the time slot W, for transmission; reading transmit data from a transmit data queue and encoding the transmit data in a data burst in accordance with a data burst format; and causing the encoded transmit data to be transmitted in the data burst during a second portion of the time slot X. The data burst may be formatted in accordance with a predefined data burst format of the wireless network and merely shifted in time, or the data burst may be formatted in accordance with a reduced-size data burst format. When such alternate data burst technique is utilized, extra available time remains to tune the wireless transceiver from receive to transmit mode, or transmit to receive mode. Thus, an additional downlink time slot(s) per data frame may be allocated to the mobile station for increased data throughput, where at least one uplink time slot per data frame is utilized for data transmission.

IPC 8 full level

H04B 7/26 (2006.01); **H04W 72/04** (2009.01)

CPC (source: EP)

H04B 7/2656 (2013.01)

Cited by

CN102695214A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 2028772 A1 20090225; **EP 2028772 B1 20100623**; AT E472204 T1 20100715; CA 2691953 A1 20090205; CA 2691953 C 20131231; DE 602007007328 D1 20100805; HK 1129782 A1 20091204; WO 2009015480 A1 20090205

DOCDB simple family (application)

EP 07113521 A 20070731; AT 07113521 T 20070731; CA 2008001408 W 20080731; CA 2691953 A 20080731; DE 602007007328 T 20070731; HK 09107735 A 20090824